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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HO, THOMAS M

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/441,081

Applicant(s)

SATO ET AL.

Examiner

Thomas M Ho

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment of October 30th, 2003 has been received and entered.

Response to Arguments

2. Applicant's arguments, see pages 9-10, filed October 30th, 2003, with respect to the rejection(s) of claim(s) 1-15 under Pegg, US patent 5,163,097 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Wilfong, US patent 5,754,652.

Response to Amendment

Claim Objections

3. The examiner recommends the applicant's correction of possible typographical error in claim 22. Claim 22 is dependent on claim 22 and consequently indefinite.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "wherein said calculating of the check value comprises...". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-8, 11-13, 16-21, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilfong, US patent 5,754,652.

In reference to claim 1:

Wilfong discloses a device for checking user identification, comprising:

- A calculation unit which calculates a check value by applying a user-specific formula to at least one randomly generated number, where the randomly generated number is the random number in 204. (Figure 3, Item 204, 205)
- A matching unit which checks if the check value matches a user-entered value that is entered by a user in response to said at least one randomly generated number being presented to the user, where the matching unit verifies if the user entered value is correct. (Figure 3, Item 207)

In reference to claim 2:

Wilfong discloses a device wherein said calculation unit outputs a fixed number, as the check value, if the user specific formula consists of a fixed number, where the fixed number outputs indicate whether the calculation was successful or not. (Figure 3, Items 208, 209)

In reference to claim 3:

Wilfong discloses a device wherein the user-specific formula includes a variable that is an indication of a time at which said calculation unit calculates the check value, where the time indicating variable is the random number used in the formula. (Column 3, lines 25-31)

Claims 6 and 11 are rejected for the same reasons as claim 1.

Claims 7 and 12 are rejected for the same reasons as claim 2.

Claims 8 and 13 are rejected for the same reasons as claim 3.

In reference to claim 16:

Wilfong discloses an apparatus where when the user enters a wrong user-entered value, the user is allowed to enter a new user-entered value in response to at least one new randomly generated number being presented to the user, where if the user enters in a wrong value, the process is returned to the point where the a new random number is generated and the user may enter a new number. If authentication fails completely, then the user may also restart the process completely,

allowing the user to reenter a new number in response to a new randomly generated number.

(Figure 3)

Claims 17 and 18 are rejected for the same reasons as claim 16.

In reference to claim 19:

Wilfong discloses a device for checking user identification comprising:

- A calculation unit which calculates a check value by applying a user-specific formula to a randomly generated number; (Figure 3, Items 204, and 205)
- A terminal unit to present the randomly generated number to a user and to input a user entered value responsive to the randomly generated number being presented to the user, where the user is inherently presented the randomly generated number in some way whether it be verbally, or through the use of a unit, where Wilfong takes the additional embodiment for use in an ATM machine. (Column 8, lines 5-12) & (Figure 3, Item 205)
- A matching unit which checks if the check value matches the user-entered value. (Figure 3, Item 207)

In reference to claim 20:

Wilfong discloses the device, wherein said calculation unit outputs a fixed number as the check value if the user-specific formula includes the fixed number. (Figure 3, Items 208, 209)

In reference to claim 21:

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Wilfong discloses a method of checking user identification, comprising:

- Generating a randomly generated number. (Figure 3, Item 204)
- Calculating a check value by applying a user-specific formula to the randomly generated number; (Figure 3, Item 207)
- Presenting the randomly generated number to a user. (Figure 3, Item 205)
- Inputting a user-entered value responsive to the randomly generated number being presented to the user. (Figure 3, Item 205)
- Checking if the check value matches the user-entered value. (Figure 3, Item 207)

In reference to claim 23:

Wilfong discloses a computer-readable medium having a program embodied therein to cause a computer to check user identification by:

- Generating a randomly generated number (Figure 3, Item 204)
- Calculating a check value by applying a user-specific formula to the randomly generated number. (Figure 3, Item 207)
- Presenting the randomly generated number to a user. (Figure 3, Item 205)
- Inputting a user-entered value responsive to the randomly generated number being presented to the user. (Figure 3, Item 205)
- Checking if the check value matches the user-entered value. (Figure 3, Item 207)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5, 9-10, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilfong and Pegg.

In reference to claim 4:

Wilfong discloses a device further comprising:

- A random number generating unit which generates said at least one randomly generated number. (Column 3, lines 23-31)

Wilfong however fails to disclose:

Pegg however discloses:

- A control-data unit which stores therein user IDs and user specific formulas associated with respective user IDs. Pegg(Figure 1) and Pegg(column 6, lines 53-57)
- A selection unit which selects one of the user-specific formulas from said control-data unit in response to a user ID of said user. Pegg (column 5, lines 33-45)

Pegg teaches that it is advantageous to have user specific formulas because it provides more secure access to a limited access system. (Column 2, lines 37-44)

Pegg further teaches that is advantageous to have user specific algorithms because one user may be more apt to remembering words, while other users, numbers. Consequently it is advantageous to the to user be able to decide upon certain attributes of their formulas, making them user specific. (Column 7, lines 14-21)

It would have been obvious to one of ordinary skill in the art at the time of invention to include the use of user specific formulas to the modulus formulas of Wilfong, given that user specific formulas would provide more secure access, and because different users would find different values easier to remember than others.

In reference to claim 5:

Wilfong fails to teach the further limitation of claim 5.

Pegg discloses a device, further comprising:

A registration/updating unit which updates one of the user-specific formulas in the control-data unit with a user-entered formula only if the user entering the user-entered formula proves knowledge of said one of the user-specific formulas by entering said one of the user-specific formulas. Pegg (Fig 2a, Fig 2b)

Pegg teaches that it is advantageous to allow a user to update one of the user specific formulas because it provides additional security. If an onlooker were to see the access code, access to the same machine would be further denied because the formula has changed. Pegg (Column 6, lines 1-10)

It would have been obvious to one of ordinary skill in the art at the time of invention to include a registration/updating unit to the invention of Wilfong, given the extra security and protection that in preventing unauthorized access to the user's account from being comprised.

Claims 9 and 14 are rejected for the same reasons as claim 4.


Claims 10 and 15 are rejected for the same reasons as claim 5.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M Ho whose telephone number is (703)305-8029. The examiner can normally be reached on M-F from 8:30am – 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached at (703)308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5484.


GREGORY MORSE
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